POTENTIOMETER WPL-LH

WPL-LH is a position transducer with conductive plastic technology designed for absolute measurements. Four different housing versions enable optimal mounting for every application.

Customizations to meet specific requirements are available upon request.

Advantages
– Adjustable measuring range: 25–300 mm
– Good long-term stability
– High resolution, precision and measurement accuracy
– Compact installation space

Application examples
– Off-highway vehicles
– Foot pedal positioning
– Valve control
– Structural monitoring



General data	
Sensor technology	Potentiometric
Type of contact	Wiper
Sensor type	Absolute measuring
Curcuit	As voltage divider

Electrical data	
Measuring range	25 to 300 mm, adjustable
Independent linearity	± 1 %
Resolution	0.05 mm achievable
Resistance range	5 kΩ, 10 kΩ
Resistance tolerance	± 20 %
Max. wiper current	5 mA in case of malfunction
Wiper load	> 100x Rn
Insulation resistance	10 GΩ at 500 VDC
Dielectric strenght	700 VAC
Supply voltage	5 VDC typ., 3 to 30 VDC possible
Output signal	Analog 0 to 100 % of supply voltage

Mechanical data	
Dimensions	See table and drawings
Travel speed	2 m/sec
Mounting	Screw, clamp
Push rod adjustment force	< 0,5 N
Lifetime	< 5 million cycles

Environmental data	
Operating temperature	-25 °C to +65 °C
Protection class acc. to IEC 60529	IP 63
EMC	Uncritical
ESD	Uncritical

Material	
Housing	Aluminium / Plastic
Push rod	Stainless steel

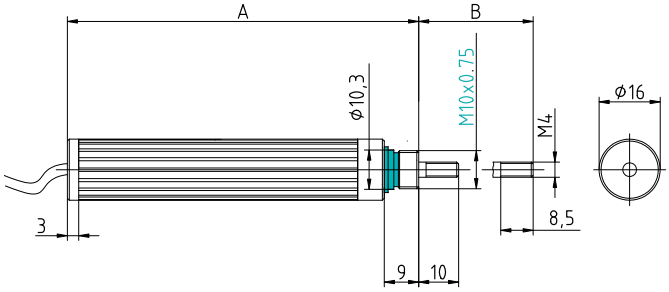
Electrical connection	
	Cable 3 x 0.14 mm^2, Length ca. 1 m

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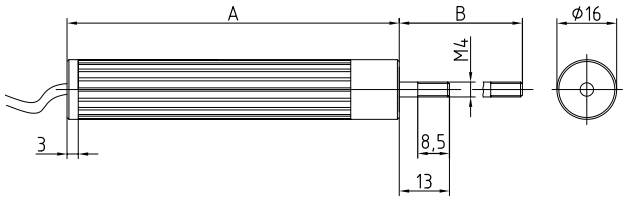
Version	SEZ	SGZ		
Measuring range mm	Length housing A mm	Length housing A mm	B mm	Resistance value Ω
25	67	77	36	10
50	92	102	61	10
75	117	127	86	10
100	142	152	111	10
150	192	202	161	10
250	292	302	261	17
300	342	352	311	21

Version	SE	SG		
Measuring range mm	Length housing A mm	Length housing A mm	B mm	Resistance value Ω
25	64	74	39	10
50	89	99	64	10
75	114	124	89	10
100	139	149	114	10
150	189	199	164	10
250	289	299	264	17
300	339	349	314	21

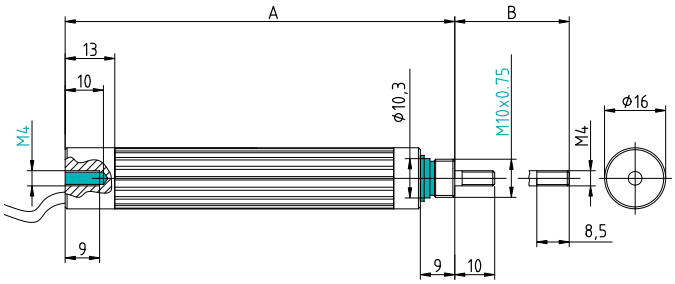
SEZ with thread on the push-rod side



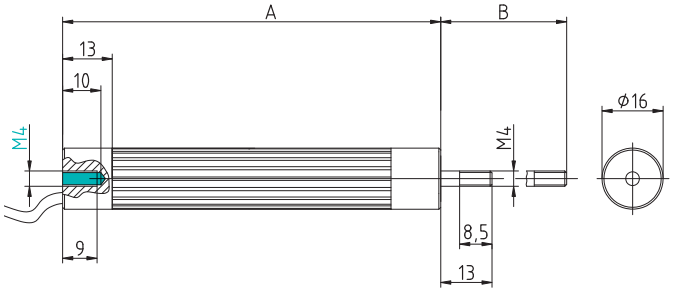
SE without thread



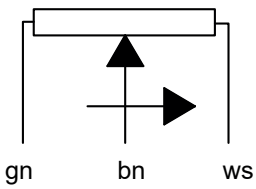
SGZ with one thread on each side (left and right)



SG with thread on the side opposite the push rod

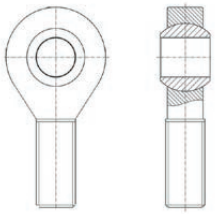


Electrical connection



Mechanical connection

Ball joint head with internal or external thread



The SE version can be mounted using a bearing bracket.

Sample order

Article no.	Product name	Measuring range	Electrical connection
H060610100	WPL-LH SGZ	100 mm	Cable

Metallux cannot picture the customer's operating and application conditions and the customer's existing environmental influences.
We therefore recommend that you carry out your own investigations into the planned use of the products under the actual operating conditions.

We continuously improve our products and also update our data sheets regularly. In this respect, there may be changes in the specification.
These changes will apply to orders received by us from the time of the update, unless otherwise agreed.

Our products comply with Directive 2011/65/EU (RoHS) including Directive 2015/863/EU and Regulation (EC) No. 1907/2006 (REACH).